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STATE OF ALASKA
Jay S. Hammond, Governor



AGE, SEX, AND SIZE COMPOSITION OF PACIFIC HERRING,
Clupea harengus pallasi, FROM EASTERN BERING SEA
COASTAL SPAWNING SITES, ALASKA, 1981

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ADF&G TECHNICAL DATA REPORTS

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The primary purpose of these reports is presentation of data. Description of programs and data collection methods is included only to the extent required for interpretation of the data. Analysis is generally limited to that necessary for clarification of data collection methods and interpretation of the basic data. No attempt is made in these reports to present analysis of the data relative to its ultimate or intended use.

Data presented in these reports is intended to be final, however, some revisions may occasionally be necessary. Minor revision will be made via errata sheets. Major revisions will be made in the form of revised reports.

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ABSTRACT

Pacific herring, *Clupea harengus pallasi*, were sampled in five eastern Bering Sea commercial fishing districts and Nelson Island, the major subsistence area, during the spring spawning migration of 1981. Samples were taken from commercial gillnet and purse seine harvests, as well as from Alaska Department of Fish and Game variable mesh gillnet and chartered purse seine vessel catches. Samples within each of the six areas were grouped by gear type, sampling week, and location.

A total of 17,235 herring was sampled for age, sex, length, and weight information. In all areas sampled, the relative proportion of herring age 5 and older decreased as the spawning season progressed. Relative abundance trends for three year classes were similar in all areas. The 1977 and 1974 year classes (ages 4 and 7) were abundant (usually at least 60% of each total area sample), while the 1975 year class (age 6) was poorly represented.

Mean length within each year class progressively decreased in samples taken northward from Togiak to Norton Sound. Mean length age did not appear to be affected by capture gear type. Generally, males slightly outnumbered females in most total season samples by about 1.2:1.

INTRODUCTION

The purpose of this report is to present age, sex, and size information for Pacific herring, *Clupea harengus pallasi*, sampled in eastern Bering Sea coastal waters during the spring spawning migration of 1981. Detailed analysis of this and prior year's data will be included within a forthcoming Alaska Department of Fish and Game (ADF&G) Informational Leaflet.

METHODS

Study Area Description

The study area consisted of the coastal waters between Cape Constantine and Cape Douglas (Figures 1 and 2). Herring samples within this area were collected from Togiak, Security Cove, Goodnews Bay, Cape Romanzof, and Norton Sound commercial fishing districts and Nelson Island, the major subsistence fishing area. Total herring spawning biomass in these locations was estimated to be 186,100 mt and was distributed as follows: 78% in Togiak, 12% in Norton Sound, 4% in Security Cove, and 2% each in Goodnews Bay, Nelson Island, and Cape Romanzof.

Sampling Techniques

As in past studies, (Barton and Steinhoff 1980; McBride et al. 1981) herring were sampled from purse seine (Togiak District) and commercial gillnet (all districts) harvests, as well as from ADF&G chartered purse seine vessel (Togiak District) and variable mesh gillnet (all districts and Nelson Island) catches. Variable mesh gillnets were 48 m long, 3 m deep and had six 8 m panels with stretch mesh sizes of either 25, 38, 51, 64, 76, and 102 mm (1.0, 1.5, 2.0, 2.5, 3.0, and 4.0 in) or 25, 38, 44, 51, 57, and 64 mm (1.0, 1.5, 1.8, 2.0, 2.3, and 2.5 in). Both sinking and floating nets were used.

All herring sampled were identified according to sex, measured (standard length in mm), and aged from scales. About 20% of all herring sampled were also weighed (wet weight in g). Aging was done using a microfiche reader to examine scales mounted on glass slides.

Sampling during the season was divided into the same weekly periods used in past studies (week 1 = 15-21 April, week 2 = 22-28 April, etc.) to facilitate temporal comparisons of herring population age structure within and between years. Sampling was also structured to allow comparison among gear types and to examine spatial differences in populations within and among districts and areas.

To determine the sample size necessary for comparisons, the following equation was used (Ivan Frohne, pers. comm.):

$$N = \frac{0.25 + \sqrt{0.0625 + a^2}}{(2a^2/Z^2)}, \text{ where}$$

a = tolerable absolute error, and

Z = upper 100 $(1-\alpha/k)\%$ point of the standard normal distribution, where

α = probability level, and

k = number of year classes.

Using $\alpha = 0.05$ and $k = 7$, calculated sample size was 156, if the estimated percentage of each year class was to be within 10% of the true percentage ($a = 0.10$) represented by each of the 7 year classes present (ages 3, 4, 5, 6, 7, 8, and 9+). Required sample size was increased to 184 to account for unreadable and missing scales which typically comprised 15% of all samples.

Catches made in variable mesh gillnets were apportioned over each weekly sampling period (e.g., 52 samples collected the first day and 22 samples collected on each of the remaining (6 days)). Each daily sample was weighted according to the catch in each of the six different mesh size panels. Subsamples from each panel were chosen randomly. Due to fluctuations in herring availability and limitations in manpower it was not always possible to obtain 184 herring samples during each sampling week for all areas and gear types.

RESULTS AND DISCUSSION

A total of 17,235 herring was examined during the period 29 April to 23 June 1981 (Tables 1-39). Trends in size and age data evident in 1981 samples paralleled those described for samples taken in 1979 and 1980 (Barton and Steinhoff 1980; McBride et al. 1981; McBride and Whitmore 1981).

No obvious trends or consistent differences in age composition, sex ratio, or mean size at age were noted among sections, subdistricts, or areas within any of the six major sampling units (Tables 1-24, 27-29, and 32-39). However, temporal differences in the abundance of year classes occurred within all six sampling units. Herring age 5 and older arrived and spawned earlier in the season than herring age 4 and younger (e.g., Tables 18 and 39).

Trends in relative abundance of three year classes were similar in all areas sampled: the 1977 and 1974 year classes (ages 4 and 7) were abundant, while the 1975 year class (age 6) was poorly represented. The 1977 year class represented over 50% of the total season sample in all areas except Nelson Island and Togiak District test purse seine samples (Tables 5, 9, 13, 18, 21, 24, 25, 26, 29, 30, 31, 35, 39). The 1974 year class usually represented at least 10% of the total season sample. The 1974 year class represented 3% or less of the total season sample in all areas. The abundance of other year classes varied among different areas. For example, the 1976 year class (age 5) was poorly represented in Togiak and Security Cove Districts, but represented 10% or more of the total season sample in all other areas.

Mean length within a year class did not appear to differ among samples taken by different gear types within the same District (e.g., Tables 5, 9, 13, 18). How-

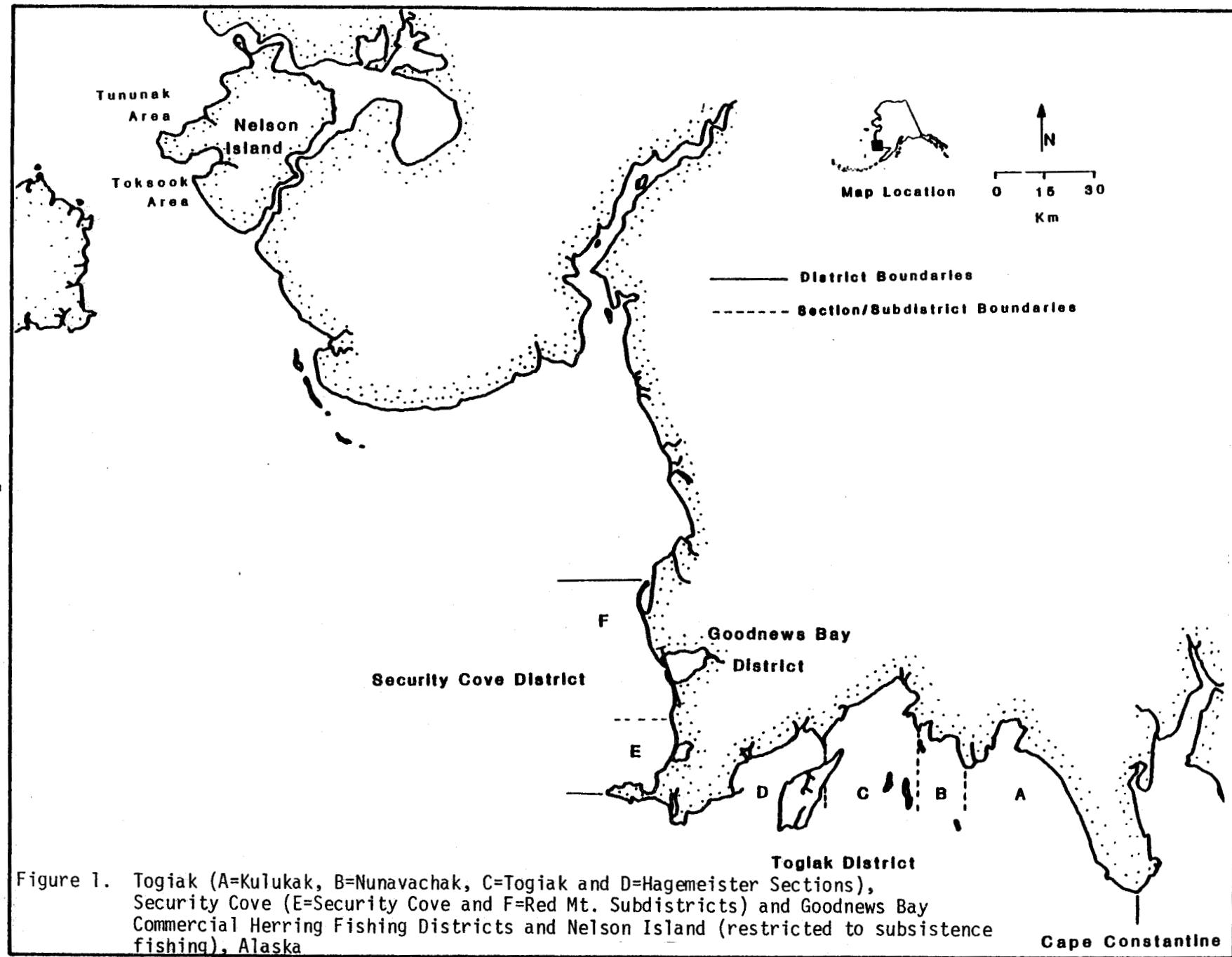
ever, mean length within all year classes decreased in samples taken progressively northward from Togiak to Norton Sound District. Trends within and between areas for mean weight within each year class were similar, but were not as clearly defined. Males outnumbered females in most total season samples by about 1.2:1.

ACKNOWLEDGMENTS

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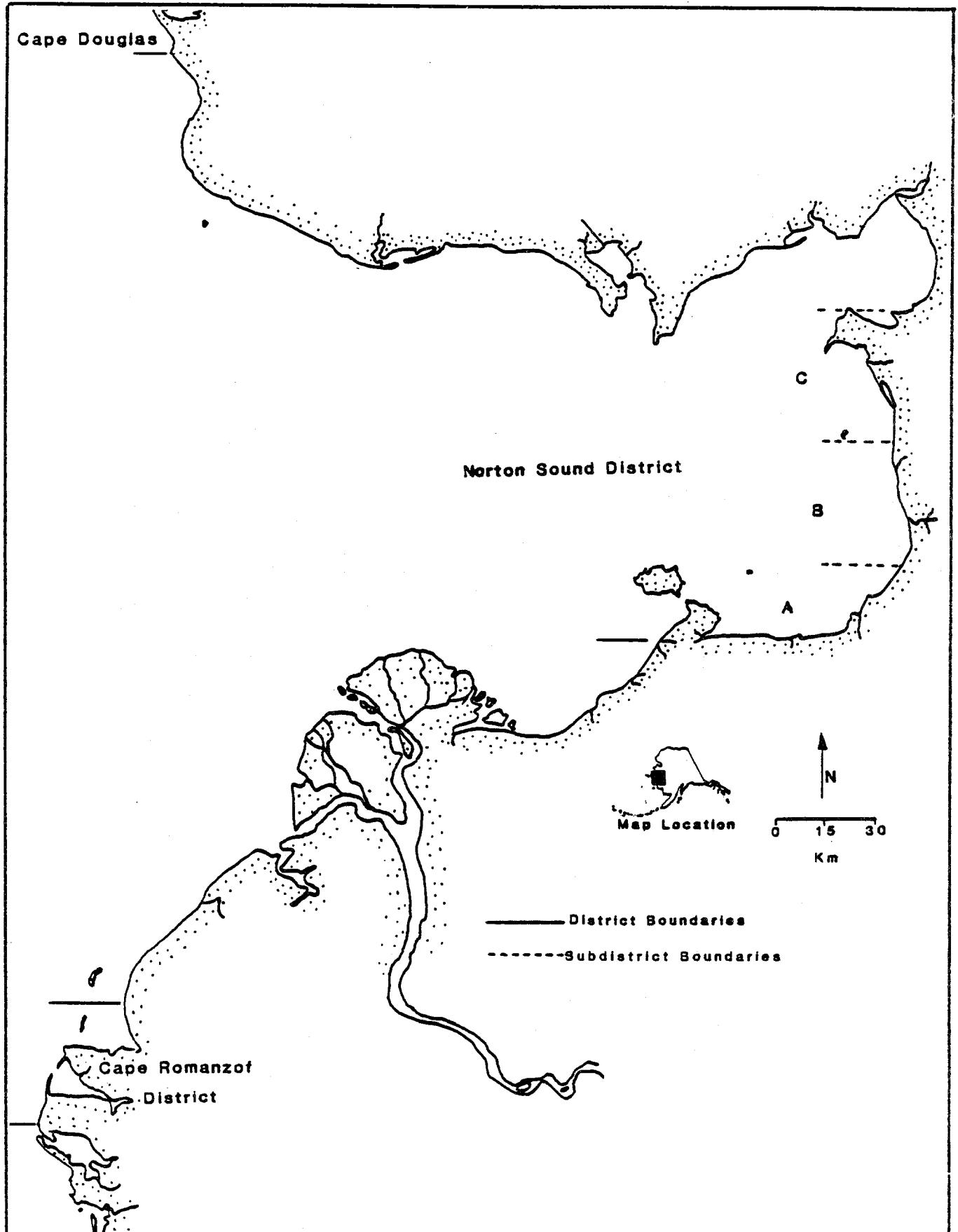


Figure 2. Cape Romanzof and Norton Sound (A=St. Michael, B=Unalakleet and C=Cape Denbigh Subdistricts) Commercial Herring Fishing Districts, Alaska

Table 1 . Age, sex and size data for Pacific herring captured by commercial purse seines in Kulukuk Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	2	-	3	1.6	-	-	227	3
	4	71	89	-	160	87.9	182	13	245	160
5/13- 5/19	5	4	14	-	18	9.9	191	2	253	18
	6	-	-	-	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-	-
	8	-	1	-	1	0.5	298	1	290	1
	9+	-	-	-	-	-	-	-	-	-
Period total		76	106	-	182	100.0	190	16	246	182

Table 2 . Age, sex and size data for Pacific herring captured by commercial purse seines in Nunavachak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	14	9	-	23	17.0	201	6	245	23
4/29- 5/ 5	5	5	5	-	10	7.4	200	2	232	10
	6	-	1	-	1	0.7	-	-	268	1
	7	31	36	-	67	49.6	307	23	277	64
	8	11	10	-	21	15.6	340	8	283	21
	9+	9	4	-	13	9.6	372	5	293	13
Period total		70	65	-	135	100.0	301	44	272	134
<hr/>										
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	80	73	-	153	86.0	189	15	237	153
5/ 6- 5/12	5	6	6	-	12	6.7	192	1	244	12
	6	1	1	-	2	1.1	-	-	270	2
	7	3	4	-	7	3.9	-	-	270	7
	8	2	1	-	3	1.7	-	-	282	3
	9+	1	-	-	1	0.6	-	-	278	1
Period total		93	85	-	178	100.0	190	16	240	178
<hr/>										
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.6	-	-	218	1
	4	82	88	-	170	93.9	181	17	237	170
5/13- 5/19	5	4	6	-	10	5.5	197	1	243	10
	6	-	-	-	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
Period total		86	95	-	181	100.0	182	18	237	181
<hr/>										
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.2	-	-	218	1
	4	176	170	-	346	70.0	187	38	237	346
All periods	5	15	17	-	32	6.5	197	4	246	32
	6	1	2	-	3	0.6	-	-	269	3
	7	34	49	-	74	15.0	307	23	274	73
	8	13	11	-	24	4.9	340	8	283	24
	9+	10	4	-	14	2.8	372	5	292	14
Total		249	245	-	494	100.0	251	78	247	493

Table 3 . Age, sex and size data for Pacific herring captured by commercial purse seines in Togiak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	-	3	-	3	2.6	-	-	243	3
	5	3	2	-	5	4.3	-	-	259	5
	6	1	2	-	3	2.6	296	1	264	3
	7	33	23	1	57	49.1	326	21	276	57
	8	19	15	-	34	29.3	349	15	283	34
	9+	4	10	-	14	12.1	367	8	286	14
Period total		60	55	1	116	100.0	340	45	277	116
<hr/>										
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	67	64	-	131	77.5	180	12	235	129
	5	11	9	-	20	11.8	210	2	247	20
	6	2	-	-	2	1.2	-	-	266	2
	7	7	6	-	13	7.7	-	-	270	13
	8	1	2	-	3	1.8	337	1	290	3
	9+	-	-	-	-	-	-	-	-	-
Period total		88	81	-	169	100.0	195	15	241	167
<hr/>										
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	8	2	-	10	8.8	102	3	205	10
	4	43	53	-	96	84.2	178	14	233	96
	5	2	4	-	6	5.3	-	-	237	6
	6	-	-	-	-	-	-	-	-	-
	7	-	1	-	1	0.9	-	-	265	1
	8	-	1	-	1	0.9	363	1	286	1
	9+	-	-	-	-	-	-	-	-	-
Period total		53	61	-	114	100.0	176	18	231	114
<hr/>										
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	8	2	-	10	2.5	102	3	205	10
	4	110	120	-	230	57.6	179	26	234	228
	5	16	15	-	31	7.8	210	2	247	31
	6	3	2	-	5	1.3	296	1	264	5
	7	40	30	1	71	17.8	326	21	275	71
	8	20	18	-	38	9.5	349	17	284	38
	9+	4	10	-	14	3.5	367	8	286	14
Total		201	197	1	399	100.0	274	78	249	397

Table 4. Age, sex and size data for Pacific herring captured by commercial purse seines in Hagenester Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	11	13	-	24	8.7	192	6	242	24
	5	4	10	-	14	5.1	215	2	248	14
	6	3	4	-	9	3.3	264	3	262	9
	7	63	62	-	125	45.3	319	48	277	121
	8	38	28	1	67	24.3	334	29	284	67
	9+	21	16	-	37	13.4	347	16	288	35
Period total		142	133	1	276	100.0	317	104	275	270
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.2	-	-	210	1
	4	133	149	-	282	70.1	187	26	237	280
	5	23	25	-	50	12.4	205	6	248	50
	6	3	1	-	4	1.0	-	-	265	4
	7	19	17	-	36	9.0	278	3	271	35
	8	14	6	-	20	5.0	333	2	284	20
	9+	5	4	-	9	2.2	358	2	283	9
Period total		199	203	-	402	100.0	213	39	243	399
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	3	-	5	2.8	-	-	213	3
	4	72	81	-	153	86.9	179	19	235	153
	5	4	8	-	12	6.8	186	2	247	12
	6	-	1	-	1	0.6	-	-	275	1
	7	1	4	-	5	2.8	273	2	267	5
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
Period total		79	97	-	176	100.0	188	23	237	176
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	4	-	6	0.7	-	-	213	6
	4	216	243	-	459	53.7	185	51	237	457
	5	33	43	-	76	8.9	203	10	248	76
	6	8	6	-	14	1.6	264	3	264	14
	7	83	83	-	166	19.4	315	53	275	161
	8	52	34	1	87	10.2	333	31	284	87
	9+	26	20	-	46	5.4	348	18	287	44
Total		420	433	1	854	100.0	274	166	253	845

Table 5. Age, sex and size data for Pacific herring captured by commercial purse seines in Kukukak, Nunavachak, Togiak and Hagenmeister Sections, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	25	25	-	50	9.5	196	12	243	50
	5	12	17	-	29	5.5	207	4	251	29
	6	6	7	-	13	2.5	272	4	263	13
	7	127	121	1	249	47.2	318	92	277	244
	8	68	53	1	122	23.1	339	52	283	122
	9+	34	30	-	64	12.1	357	29	286	42
Period total		272	253	2	527	100.0	319	193	273	520
<hr/>										
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.1	-	-	210	1
	4	280	286	-	566	75.6	186	53	236	562
	5	42	40	-	82	10.9	205	9	247	82
	6	6	2	-	8	1.1	-	-	267	8
	7	29	27	-	56	7.3	278	3	271	55
	8	17	9	-	26	3.5	334	3	285	26
	9+	6	4	-	10	1.3	358	2	282	10
Period total		380	369	-	749	100.0	284	70	243	744
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5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	11	9	-	20	2.9	102	3	211	19
	4	268	311	-	579	88.7	180	63	238	579
	5	14	32	-	46	7.0	190	5	247	46
	6	-	1	-	1	0.2	-	-	275	1
	7	1	5	-	6	0.9	273	2	267	6
	8	-	2	-	2	0.3	331	2	288	2
	9+	-	-	-	-	-	-	-	-	-
Period total		294	359	-	653	100.0	184	75	238	653
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All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	11	9	-	20	1.0	102	3	211	20
	4	573	622	-	1195	61.9	184	128	238	1191
	5	68	89	-	157	8.1	201	18	248	157
	6	12	10	-	22	1.1	272	4	265	22
	7	157	153	1	311	16.1	316	97	275	305
	8	85	64	1	150	7.8	338	57	284	150
	9+	40	34	-	74	3.8	357	31	287	72
Total		946	981	2	1929	100.0	265	338	250	1917

Table 6. Age, sex and size data for Pacific herring captured by commercial gillnets in Kulukak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	4	6	-	10	43.5	201	10	242	10
	5	2	-	-	2	8.7	243	2	259	2
	6	-	-	-	-	-	-	-	-	-
	7	6	1	-	7	30.4	297	7	274	7
	8	1	-	-	1	4.3	298	1	282	1
	9+	1	2	-	3	13.0	336	3	290	3
	Period total	14	9	-	23	100.0	256	23	261	23
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.6	-	-	230	1
	4	70	45	-	115	67.6	191	57	240	114
	5	13	11	-	24	14.1	205	16	249	24
	6	1	-	-	1	0.6	-	-	240	1
	7	15	7	-	22	12.9	252	19	269	22
	8	5	1	-	6	3.5	292	4	286	6
	9+	1	-	-	1	0.6	-	-	278	1
	Period total	106	64	-	170	100.0	210	96	247	169
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.4	-	-	224	1
	4	108	97	-	205	99.3	186	23	242	205
	5	7	11	-	18	7.9	205	1	254	19
	6	-	-	-	-	-	-	-	-	-
	7	1	1	-	2	0.9	-	-	244	2
	8	-	-	-	-	-	-	-	-	-
	9+	-	1	-	1	0.4	-	-	265	1
	Period total	116	111	-	227	100.0	187	24	243	227
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	1	-	2	0.5	-	-	227	2
	4	182	148	-	330	78.6	191	90	241	329
	5	22	22	-	44	10.5	209	19	252	44
	6	1	-	-	1	0.2	-	-	240	1
	7	22	9	-	31	7.4	264	26	270	31
	8	6	1	-	7	1.7	293	5	285	7
	9+	2	3	-	5	1.2	336	3	283	5
	Total	236	184	-	420	100.0	213	143	246	419

Table 7. Age, sex and size data for Pacific herring captured by commercial gillnets in Nunavachak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
4/29- 5/5	4	41	32	-	73	30.3	195	11	244	73
	5	21	11	-	32	13.3	218	10	233	31
	6	9	2	-	11	4.6	229	5	266	11
	7	54	40	1	95	39.4	262	22	273	92
	8	14	12	-	26	10.8	286	5	281	25
	9+	2	2	-	4	1.7	331	2	293	4
	Period total	141	99	1	241	100.0	242	55	262	236
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	74	62	1	137	64.0	178	18	238	136
	5	7	11	-	18	11.0	-	-	246	18
	6	1	-	-	1	0.6	-	-	262	1
	7	4	2	-	6	3.7	-	-	264	6
	8	-	1	-	1	0.6	-	-	274	1
	9+	-	-	-	-	-	-	-	-	-
	Period total	86	76	1	163	100.0	178	18	240	162
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	115	94	1	210	52.0	184	29	240	209
	5	28	22	-	50	12.4	218	10	252	49
	6	10	2	-	12	3.0	229	5	265	12
	7	58	42	1	101	25.0	262	22	272	98
	8	14	13	-	27	6.7	286	5	280	26
	9+	2	2	-	4	1.0	331	2	293	4
	Total	227	175	2	404	100.0	226	73	253	398

Table 8. Age, sex and size data for Pacific herring captured by commercial gillnets in Togiak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	38	28	1	67	24.2	191	23	240	67
	5	13	16	1	24	8.7	227	6	253	24
	6	6	7	-	13	4.7	254	5	257	12
	7	61	38	7	106	38.3	277	27	273	105
	8	27	22	4	53	19.1	318	13	281	53
	9+	6	8	-	14	5.1	-	-	283	14
	Period total	151	113	13	277	100.0	252	74	264	275
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5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	25	25	-	50	89.3	186	6	237	46
	5	2	1	-	3	5.4	-	-	238	3
	6	2	1	-	3	5.4	-	-	255	3
	7	-	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
	Period total	29	27	-	56	100.0	186	6	238	52
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5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	66	61	-	127	83.0	179	12	238	126
	5	6	3	-	9	5.9	194	2	247	9
	6	-	2	-	2	1.3	-	-	254	2
	7	6	5	-	11	7.2	331	1	267	11
	8	1	2	-	3	2.0	271	1	288	3
	9+	-	1	-	1	0.7	300	1	301	1
	Period total	79	74	-	153	100.0	202	17	242	152
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All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	129	114	1	244	50.2	187	41	238	239
	5	21	14	1	36	7.4	219	8	250	36
	6	8	10	-	18	3.7	254	5	256	17
	7	67	43	7	117	24.1	279	28	272	116
	8	28	24	4	56	11.5	315	14	281	56
	9+	6	9	-	15	3.1	300	1	284	15
	Total	259	214	13	486	100.0	239	97	255	479

Table 9. Age, sex and size data for Pacific herring captured by commercial gillnets in Kulukak, Nunavachak and Togiek Sections, Togiek District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	83	66	1	150	27.7	194	44	242	150
	5	36	21	1	58	10.7	223	18	255	57
	6	15	9	-	24	4.4	241	10	261	23
	7	121	79	8	208	38.4	274	56	273	204
	8	42	34	4	80	14.8	308	19	281	79
	9+	9	12	-	21	3.9	334	5	286	21
	Period total	306	221	14	541	100.0	249	192	263	534
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.4	-	-	230	1
	4	95	70	-	165	73.0	191	63	239	160
	5	15	12	-	27	11.9	205	16	248	27
	6	3	1	-	4	1.8	-	-	251	4
	7	15	7	-	22	9.7	252	19	269	22
	8	5	1	-	6	2.7	292	4	286	6
	9+	1	-	-	1	0.4	-	-	278	1
	Period total	135	91	-	226	100.0	208	102	245	221
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.2	-	-	224	1
	4	248	220	1	469	86.4	182	53	240	467
	5	20	25	-	45	8.3	198	3	249	45
	6	1	2	-	3	0.6	-	-	257	3
	7	11	8	-	19	3.5	331	1	266	19
	8	1	3	-	4	0.7	271	1	285	4
	9+	-	2	-	2	0.4	300	1	283	2
	Period total	281	261	1	543	100.0	189	59	242	541
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	1	-	2	0.2	-	-	227	2
	4	426	356	2	784	59.8	189	160	240	772
	5	71	58	1	130	9.9	213	37	251	129
	6	19	12	-	31	2.4	241	10	259	30
	7	147	94	8	249	19.0	269	76	272	245
	8	48	38	4	90	6.9	304	24	281	89
	9+	10	14	-	24	1.8	328	6	285	24
	Total	722	573	15	1310	100.0	224	313	251	1296

Table 10. Age, sex and size data for Pacific herring captured by test purse seines in Nunavachak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-
4/22- 4/28	5	-	-	-	-	-	-	-	-	-
	6	1	1	-	2	2.3	300	2	270	2
	7	30	22	-	52	59.1	324	52	277	52
	8	16	14	-	30	34.1	363	30	284	30
	9+	3	1	-	4	4.5	368	4	286	4
	Period total	50	38	-	88	100.0	339	88	279	88

Table 11. Age, sex and size data for Pacific herring captured by test purse seines in Togiak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	1.3	-	-	-	-
	4	18	20	-	38	48.7	177	4	218	1
5/ 6- 5/12	5	3	4	-	7	9.0	-	-	238	37
	6	2	1	-	3	3.8	-	-	250	7
	7	11	10	1	22	28.2	236	2	270	21
	8	5	-	-	5	6.4	-	-	283	4
	9+	1	1	-	2	2.6	-	-	285	1
	Period total	40	37	1	78	100.0	197	6	253	73

Table 12. Age, sex and size data for Pacific herring captured by test purse seines in Hagemeister Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	3	2	-	5	3.6	-	-	-	-
4/29- 5/ 5	5	5	4	-	9	6.5	223	3	233	5
	6	4	1	-	5	3.6	283	2	251	9
	7	36	30	-	66	47.8	275	7	267	5
	8	14	26	-	40	29.0	352	2	273	66
	9+	10	3	-	13	9.4	356	2	282	40
	Period total	72	66	-	138	100.0	286	16	274	138

Table 13. Age, sex and size data for Pacific herring captured by test purse seines in Munavachak, Togink and Hagenester Sections, Togink District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-
4/22- 4/28	5	-	-	-	-	-	-	-	-	-
	6	1	1	-	2	2.3	300	2	270	2
	7	30	22	-	52	59.1	324	52	277	52
	8	16	14	-	30	34.1	363	30	284	30
	9+	3	1	-	4	4.5	368	4	286	4
Period total		50	38	-	88	100.0	339	88	279	88
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
4/29- 5/ 5	4	3	2	-	5	3.6	-	-	233	5
	5	5	4	-	9	6.5	223	3	251	9
	6	4	1	-	5	3.6	283	2	267	5
	7	36	30	-	66	47.8	275	7	273	66
	8	14	26	-	40	29.0	352	2	282	40
	9+	10	3	-	13	9.4	356	2	286	13
Period total		72	66	-	138	100.0	286	16	274	138
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	1.3	-	-	218	1
5/ 6- 5/12	4	18	20	-	38	48.7	177	4	238	37
	5	3	4	-	7	9.0	-	-	250	7
	6	2	1	-	3	3.8	-	-	270	2
	7	11	10	1	22	28.2	236	2	273	21
	8	5	-	-	5	6.4	-	-	283	4
	9+	1	1	-	2	2.6	-	-	285	1
Period total		40	37	1	78	100.0	197	6	253	73
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.3	-	-	218	1
All periods	4	21	22	-	43	14.1	177	4	237	42
	5	8	8	-	16	5.3	223	3	250	16
	6	7	3	-	10	3.3	292	4	268	9
	7	77	62	1	140	46.1	315	61	274	139
	8	35	40	-	75	24.7	363	32	282	74
	9+	14	5	-	19	6.3	364	6	286	18
Total		162	141	1	304	100.0	323	110	270	299

Table 14. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Kukulun Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (g)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
4/22- 4/28	4	2	-	-	2	0.9	190	2	243	2
	5	6	1	-	7	1.3	237	7	243	7
	6	2	-	-	2	0.9	231	2	277	2
	7	80	43	6	129	40.3	281	129	277	129
	8	33	19	6	58	27.1	311	58	285	58
	9+	11	4	1	16	7.3	302	16	284	16
	Period total	134	67	13	214	100.0	288	214	279	214
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
4/29- 5/ 5	4	-	1	-	1	0.5	201	1	250	1
	5	3	-	-	3	1.4	237	3	247	3
	6	2	2	-	4	1.9	271	4	249	4
	7	63	41	-	104	49.8	309	103	280	103
	8	19	25	-	74	35.4	334	74	288	74
	9+	15	8	-	23	11.0	354	23	288	23
	Period total	132	77	-	209	100.0	321	208	283	208
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	1	-	3	1.2	147	2	222	3
5/ 6- 5/12	4	46	101	-	147	49.3	194	73	243	147
	5	12	16	-	28	11.6	227	16	237	28
	6	2	2	-	4	1.7	206	2	242	4
	7	16	15	-	31	12.7	280	13	274	31
	8	4	3	-	7	2.9	309	2	284	7
	9+	-	1	-	1	0.4	-	-	282	1
	Period total	102	139	-	241	100.0	212	108	250	241
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	10	4	-	14	2.5	165	1	221	14
5/13- 5/19	4	274	265	-	429	83.9	180	46	243	479
	5	23	21	-	44	7.2	179	7	233	44
	6	-	4	-	4	0.7	224	1	243	4
	7	12	6	-	18	3.2	237	3	278	18
	8	8	2	-	10	1.8	-	-	291	10
	9+	1	1	-	2	0.4	-	-	300	2
	Period total	328	243	-	571	100.0	183	58	246	571
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	8	4	-	12	5.6	142	2	216	12
5/20- 5/26	4	105	81	-	186	57.3	172	18	238	186
	5	3	7	-	10	4.7	204	1	255	10
	6	1	-	-	1	0.5	-	-	270	1
	7	1	2	-	3	1.4	-	-	273	3
	8	-	-	-	-	-	-	-	-	-
	9+	-	1	-	1	0.5	425	1	312	1
	Period total	118	95	-	213	100.0	184	22	239	213
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	13	23	-	36	15.3	197	2	221	38
5/27- 6/ 2	4	96	102	-	198	79.5	158	24	243	198
	5	4	4	-	8	3.2	217	1	239	8
	6	-	-	-	-	-	-	-	-	-
	7	-	1	-	1	0.4	-	-	274	1
	8	2	-	-	2	0.8	-	-	302	2
	9+	1	1	-	2	0.8	-	-	344	2
	Period total	118	131	-	249	100.0	156	27	242	249
	1	-	-	-	-	-	-	-	-	-
	2	-	1	-	1	1.0	-	-	179	1
	3	24	13	-	37	19.0	128	3	214	39
6/ 3- 6/ 9	4	34	20	2	56	34.0	146	4	234	54
	5	2	-	-	2	2.0	-	-	243	2
	6	-	-	-	-	-	-	-	-	-
	7	2	-	-	2	2.0	252	1	283	2
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
	Period total	64	34	2	100	100.0	141	10	228	78
	1	-	-	-	-	-	-	-	-	-
	2	-	1	-	1	0.1	-	-	179	1
	3	41	45	-	106	5.7	129	19	218	106
All periods	4	577	510	2	1089	40.6	182	170	242	1087
	5	53	49	-	102	5.2	221	33	255	102
	6	7	8	-	15	0.8	247	1	247	15
	7	174	108	6	288	14.0	292	249	278	287
	8	96	49	6	151	8.4	324	134	287	151
	9+	28	16	1	45	2.5	336	48	289	45
	Total	996	786	15	1797	100.0	246	447	232	1794

Table 15. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Nunavachak Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	5	1	-	6	1.7	208	6	246	6
4/29- 5/ 5	5	5	2	-	7	1.9	247	7	256	7
	6	4	5	-	9	2.5	275	9	267	9
	7	123	84	-	207	57.0	305	207	274	207
	8	69	48	-	117	32.2	332	117	281	117
	9+	11	5	1	17	4.7	353	17	286	17
Period total		217	145	1	363	100.0	312	363	276	363
<hr/>										
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	1.1	-	-	213	1
	4	43	24	-	67	76.1	193	5	235	66
5/ 6- 5/12	5	3	4	-	9	10.2	204	3	248	9
	6	-	-	-	-	-	-	-	-	-
	7	2	4	-	6	6.8	-	-	269	6
	8	3	2	-	5	5.7	320	1	275	5
	9+	-	-	-	-	-	-	-	-	-
Period total		54	34	-	88	100.0	211	9	241	87
<hr/>										
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.2	-	-	213	1
All periods	4	48	25	-	73	16.2	201	11	236	72
	5	10	6	-	16	3.5	234	10	252	16
	6	4	5	-	9	2.0	275	9	267	9
	7	123	88	-	213	47.2	305	207	274	213
	8	72	50	-	122	27.1	332	118	281	122
	9+	11	5	1	17	3.8	353	17	286	17
Total		271	179	1	451	100.0	310	372	269	450

Table 16. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Togink Section, Togink District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gn)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-
4/22- 4/28	5	2	-	-	2	1.1	218	2	253	2
	6	1	1	-	2	1.1	284	2	267	2
	7	51	37	-	88	49.4	298	81	277	87
	8	36	30	-	66	37.1	327	60	285	66
	9+	13	7	-	20	11.2	342	19	290	20
Period total		103	75	-	178	100.0	313	164	281	177
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
4/29- 5/ 5	4	1	-	-	1	50.0	217	1	229	1
	5	-	-	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	-	-
	7	1	-	-	1	50.0	334	1	282	1
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
Period total		2	-	-	2	100.0	276	2	256	2
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	-	-	2	0.4	-	-	216	2
5/ 6- 5/12	4	136	160	-	296	54.4	188	45	241	296
	5	23	23	-	46	8.5	197	6	252	46
	6	6	9	-	15	2.8	251	8	270	15
	7	60	56	-	116	21.3	268	42	275	115
	8	31	20	1	52	9.6	296	17	284	52
	9+	6	11	-	17	3.1	319	9	291	17
Period total		264	279	1	544	100.0	243	127	255	543
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	3	1	-	4	2.8	130	3	211	4
5/13- 5/19	4	49	56	1	106	74.1	194	7	235	106
	5	2	5	-	7	4.9	205	3	248	7
	6	-	1	-	1	0.7	-	-	262	1
	7	10	10	-	20	14.0	290	1	270	20
	8	2	3	-	5	3.5	296	1	282	5
	9+	-	-	-	-	-	-	-	-	-
Period total		66	76	1	143	100.0	197	15	241	143
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
5/27- 6/ 2	4	80	51	-	131	60.4	158	12	235	131
	5	9	5	-	14	8.6	157	1	238	14
	6	1	-	-	1	0.6	244	1	271	1
	7	5	6	-	11	6.7	273	1	269	11
	8	2	1	-	3	1.8	278	1	275	3
	9+	3	-	-	3	1.8	-	-	293	3
Period total		100	63	-	163	100.0	178	16	239	163
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	5	1	-	6	0.6	130	3	213	6
All periods	4	266	247	1	534	51.8	184	65	238	534
	5	36	33	-	69	6.7	199	12	249	69
	6	8	11	-	19	1.8	257	11	269	19
	7	127	109	-	236	22.9	288	126	275	234
	8	71	54	1	126	12.2	319	79	284	126
	9+	22	18	-	40	3.9	335	28	291	40
Total		535	493	2	1030	100.0	273	324	255	1028

Table 17. Age, sex and size data for Pacific herring captured by variable mesh gillnets in
Wagemeister Section, Togiak District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-
4/22- 4/28	5	-	-	-	-	-	-	-	-	-
	6	1	1	-	2	4.8	275	2	274	2
	7	19	7	-	26	61.9	298	26	281	26
	8	8	3	-	11	26.2	317	11	286	11
	9+	-	3	-	3	7.1	385	3	290	3
Period total		28	14	-	42	100.0	308	42	283	42

Table 10. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Kukulak, Hoonah, Tegash and Hagonoister Sections, Tegash District, 1970.

Sample Period	Age (years)	Sex			Percent of Total	Mesh Weight (gns)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Males	Females	Unknown					
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-
	4	2	-	-	2	0.3	199	2	245
4/22- 4/28	5	8	1	-	9	2.1	233	7	260
	6	4	2	-	6	1.4	270	4	273
	7	156	87	6	243	56.0	289	234	277
	8	77	52	6	135	31.1	219	127	285
	9+	24	14	1	39	9.0	329	38	288
	Period total	265	156	13	434	100.0	360	429	433
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-
	4	6	2	-	8	1.4	268	6	245
4/29- 5/ 5	5	8	2	-	10	1.7	250	10	257
	6	6	7	-	13	2.3	274	13	268
	7	187	125	-	212	54.4	306	311	276
	8	118	73	-	191	33.3	333	191	283
	9+	26	13	1	40	7.0	355	40	287
	Period total	351	222	1	574	100.0	315	573	573
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	5	1	-	6	0.7	147	2	218
5/ 6- 5/12	4	245	285	-	530	46.7	193	123	241
	5	46	43	-	83	9.5	217	25	253
	6	8	11	-	19	2.2	242	10	268
	7	78	75	-	153	17.3	271	35	275
	8	38	25	1	64	7.3	276	20	283
	9+	6	12	-	18	2.1	317	9	291
	Period total	426	452	1	873	100.0	238	244	232
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	13	5	-	18	2.3	124	4	219
5/13- 5/19	4	323	261	1	585	81.9	182	53	242
	5	23	26	-	51	7.1	187	10	252
	6	-	5	-	5	0.7	226	1	263
	7	22	16	-	38	5.3	266	4	274
	8	19	5	-	15	2.1	276	1	288
	9+	1	1	-	2	0.3	-	300	2
	Period total	394	319	1	714	100.0	186	73	245
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	8	4	-	12	5.6	162	2	216
5/20- 5/26	4	185	81	-	186	87.0	172	10	238
	5	3	7	-	10	4.7	204	1	255
	6	-	1	-	1	0.5	-	270	1
	7	1	2	-	3	1.4	-	273	3
	8	-	-	-	-	-	-	-	-
	9+	-	1	-	1	0.5	425	1	312
	Period total	118	95	-	213	100.0	184	22	239
	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	15	23	-	38	9.2	167	2	221
5/27- 6/ 2	4	176	153	-	329	79.9	158	36	240
	5	13	9	-	22	5.3	187	2	246
	6	1	-	-	1	0.2	244	1	271
	7	5	7	-	12	2.9	273	1	270
	8	4	1	-	5	1.2	278	1	286
	9+	4	1	-	5	1.2	-	297	5
	Period total	218	194	-	412	100.0	164	43	241
	1	-	-	-	-	-	-	-	-
	2	-	1	-	1	1.0	-	-	179
	3	26	13	-	39	29.0	129	1	214
6/ 3- 6/ 9	4	34	20	2	56	56.0	166	6	236
	5	2	-	-	2	2.0	-	-	243
	6	-	-	-	-	-	-	-	-
	7	2	-	-	2	2.0	252	1	283
	8	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-
	Period total	64	34	2	100	100.0	161	10	228
	1	-	-	-	-	-	-	-	-
	2	-	1	-	1	0.8	-	-	179
	3	67	46	-	113	34.4	130	13	218
All periods	4	891	602	3	1696	51.1	184	246	241
	5	77	68	-	187	5.6	219	57	253
	6	20	25	-	45	1.4	260	31	268
	7	445	312	6	763	23.0	296	468	276
	8	247	156	2	410	12.3	326	342	284
	9+	61	42	2	103	3.2	341	88	289
	Total	1830	1472	18	3320	100.0	281	1385	236
									3314

Table 19. Age, sex and size data for Pacific herring captured by commercial gillnets in Security Cove Subdistrict, Security Cove District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	15	16	-	31	22.8	212	7	242	27
	5	8	8	-	16	11.8	226	3	231	14
	6	3	2	-	5	3.7	251	2	243	5
	7	23	30	-	53	39.0	270	12	272	49
	8	7	8	-	15	11.0	322	3	279	15
	9+	8	8	-	16	11.8	279	2	282	14
	Period total	64	72	-	136	100.0	256	29	265	124
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	137	130	-	267	72.0	183	54	235	261
	5	24	16	-	40	10.8	223	8	249	39
	6	4	2	-	6	1.4	272	1	245	5
	7	23	20	-	43	11.4	278	8	249	41
	8	6	5	-	11	3.0	242	2	277	9
	9+	3	1	-	4	1.1	-	-	284	3
	Period total	197	174	-	371	100.0	201	73	242	358
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	134	113	1	248	87.0	177	46	236	242
	5	13	16	-	27	10.2	206	7	247	29
	6	-	1	-	1	0.4	-	-	271	1
	7	4	2	-	6	2.1	246	2	246	6
	8	-	-	-	-	-	-	-	-	-
	9+	-	1	-	1	0.4	-	-	284	1
	Period total	151	133	1	285	100.0	184	55	238	279
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	1	-	3	1.7	-	-	216	3
	4	99	72	-	171	95.5	168	32	231	171
	5	-	1	-	1	0.6	-	-	242	1
	6	1	-	-	1	0.6	-	-	260	1
	7	-	2	-	2	1.1	-	-	246	2
	8	-	1	-	1	0.6	296	1	291	1
	9+	-	-	-	-	-	-	-	-	-
	Period total	102	77	-	179	100.0	171	33	231	179
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	1	-	3	0.3	-	-	216	3
	4	385	331	1	717	73.8	179	139	235	201
	5	45	41	-	86	8.9	217	18	249	83
	6	8	5	-	13	1.3	258	3	264	12
	7	50	54	-	104	10.7	271	22	270	98
	8	13	14	-	27	2.8	291	4	279	25
	9+	11	10	-	21	2.2	279	2	283	18
	Total	514	456	1	971	100.0	199	190	242	940

Table 20. Age, sex and size data for Pacific herring captured by commercial gillnets in Red Mountain Subdistrict, Security Cove District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	22	11	-	33	62.3	166	5	233	32
	5	6	4	-	10	18.7	197	2	245	10
	6	1	1	-	2	3.8	202	2	247	2
	7	5	1	-	6	11.3	-	-	269	6
	8	-	2	-	2	3.8	334	2	281	2
	9+	-	-	-	-	-	-	-	-	-
	Period total	34	19	-	53	100.0	207	11	242	52

Table 21. Age, sex and size data for Pacific herring captured by commercial gillnets in Security Cove and Red Mountain Subdistricts, Security Cove District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
4/29- 5/5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	15	16	-	31	22.8	212	7	242	27
	5	8	8	-	16	11.8	226	3	251	14
	6	3	2	-	5	3.7	251	2	263	5
	7	23	30	-	53	39.0	270	12	272	49
	8	7	8	-	15	11.0	322	3	279	13
	9+	8	8	-	16	11.8	279	2	282	14
	Period total	64	72	-	136	100.0	256	29	263	124
5/6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	137	130	-	267	72.0	183	54	235	261
	5	24	16	-	40	10.8	223	8	249	39
	6	4	2	-	6	1.6	272	1	263	5
	7	23	20	-	43	11.4	278	8	269	41
	8	6	5	-	11	3.0	242	2	277	9
	9+	3	1	-	4	1.1	-	-	284	3
	Period total	197	174	-	371	100.0	201	73	242	358
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	156	124	1	281	83.1	176	51	236	274
	5	19	20	-	39	11.3	204	9	247	39
	6	1	2	-	3	0.9	202	2	255	3
	7	9	3	-	12	3.6	246	2	267	12
	8	-	2	-	2	0.6	334	2	281	2
	9+	-	1	-	1	0.3	-	-	284	1
	Period total	185	152	1	338	100.0	188	66	239	331
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	1	-	3	1.7	-	-	216	3
	4	99	72	-	171	95.5	168	32	231	171
	5	-	1	-	1	0.6	-	-	242	1
	6	1	-	-	1	0.6	-	-	260	1
	7	-	2	-	2	1.1	-	-	266	2
	8	-	1	-	1	0.6	296	1	291	1
	9+	-	-	-	-	-	-	-	-	-
	Period total	102	77	-	179	100.0	171	33	231	179
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	1	-	3	0.3	-	-	216	3
	4	407	342	1	750	73.2	179	144	235	733
	5	51	45	-	96	9.4	215	20	248	93
	6	9	6	-	15	1.5	235	5	262	14
	7	55	55	-	110	10.7	271	22	270	104
	8	13	16	-	29	2.8	302	8	279	27
	9+	11	10	-	21	2.1	279	2	283	18
	Total	548	475	1	1024	100.0	200	201	242	992

Table 22. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Security Cove Subdistrict, Security Cove District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	
		Hole	Female	Unknown					Length (mm)	Number Measured
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	6	7	-	13	5.0	205	13	240	13
4/29- 5/ 5	5	5	1	-	6	2.3	218	6	250	6
	6	3	1	-	4	1.6	262	4	260	4
	7	39	46	-	85	32.9	320	86	274	82
	8	40	47	-	87	33.7	356	84	282	87
	9+	24	39	-	63	24.4	382	63	287	63
	Period total	117	141	-	258	100.0	338	250	277	235
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.3	190	1	235	1
5/ 6- 5/12	4	66	89	-	155	52.2	192	153	234	153
	5	14	11	-	25	8.4	217	25	247	25
	6	2	3	-	5	1.7	254	5	257	5
	7	17	20	-	37	12.5	297	37	272	37
	8	13	18	-	31	10.4	346	31	285	30
	9+	22	21	-	43	14.5	372	43	291	43
	Period total	135	162	-	297	100.0	251	293	253	294
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	4	-	6	6.7	136	5	213	5
5/13- 5/19	4	38	40	-	78	89.7	182	76	233	78
	5	2	-	-	2	2.3	207	2	247	2
	6	-	-	-	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-	-
	8	-	1	-	1	1.1	350	1	287	1
	9+	-	-	-	-	-	-	-	-	-
	Period total	42	45	-	87	100.0	182	84	233	86
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	12	12	-	24	28.9	113	21	205	23
5/20- 5/26	4	29	21	-	50	60.2	153	48	227	49
	5	1	3	-	4	4.8	192	4	241	4
	6	-	-	-	-	-	-	-	-	-
	7	2	1	-	3	3.6	246	3	246	3
	8	1	-	-	1	1.2	170	1	280	1
	9+	-	1	-	1	1.2	262	1	272	1
	Period total	45	38	-	83	100.0	150	78	224	81
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	68	57	1	126	31.9	108	123	203	126
5/27- 6/ 2	4	115	105	-	220	55.7	147	218	229	219
	5	13	14	-	27	6.8	173	27	243	27
	6	2	1	-	3	0.8	186	3	254	3
	7	4	4	-	8	2.0	247	8	244	8
	8	4	3	-	7	1.8	253	7	271	7
	9+	3	1	-	4	1.0	297	4	287	4
	Period total	209	183	1	395	100.0	142	390	224	394
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	5	4	-	9	4.2	117	9	211	9
6/ 3- 6/ 9	4	91	72	-	163	75.5	150	163	232	163
	5	13	6	-	19	8.8	149	19	240	19
	6	-	3	-	3	1.4	193	3	249	3
	7	7	5	-	12	5.6	223	12	241	12
	8	-	1	-	1	0.5	231	1	268	1
	9+	6	3	-	9	4.2	246	9	276	9
	Period total	122	94	-	216	100.0	160	215	236	216
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	88	77	1	166	12.4	110	159	204	164
All periods	4	345	334	-	679	50.8	164	671	232	675
	5	48	35	-	83	6.2	190	83	244	83
	6	7	8	-	15	1.1	230	15	255	15
	7	69	76	-	145	10.7	300	140	271	142
	8	58	70	-	128	9.4	345	125	282	127
	9+	55	65	-	120	9.0	365	120	287	120
	Total	670	665	1	1336	100.0	210	1313	244	1326

Table 23. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Red Mountain Subdistrict, Security Cove District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	13	7	-	20	55.6	177	5	231	20
	5	1	2	-	3	8.3	-	-	238	3
	6	-	-	-	-	-	-	-	-	-
	7	2	4	-	6	16.7	249	2	260	6
	8	2	2	-	4	11.1	286	1	277	4
	9+	-	3	-	3	8.3	-	-	282	3
	Period total	18	18	-	36	100.0	209	8	246	36
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	-	-	2	6.3	-	-	210	2
	4	8	12	-	20	62.5	146	7	218	20
	5	4	-	-	4	12.5	-	-	244	4
	6	1	1	-	2	6.3	-	-	247	2
	7	1	3	-	4	12.5	-	-	261	4
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
	Period total	16	16	-	32	100.0	146	7	228	32
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	-	-	2	2.9	-	-	210	2
	4	21	19	-	40	58.0	159	12	224	40
	5	5	2	-	7	10.3	-	-	241	7
	6	1	1	-	2	2.9	-	-	247	2
	7	3	7	-	10	14.7	249	2	260	10
	8	2	2	-	4	5.9	286	1	277	4
	9+	-	3	-	3	4.4	-	-	282	3
	Total	34	34	-	68	100.0	179	15	237	68

Table 24. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Security Cove and Red Mountain Subdistricts, Security Cove District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Hole	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	6	7	-	13	5.0	205	12	240	13
	5	5	1	-	6	2.3	218	4	250	6
	6	3	1	-	4	1.6	262	4	260	4
	7	39	46	-	85	32.9	220	60	274	82
	8	40	47	-	87	33.7	354	84	282	87
	9+	24	39	-	63	24.4	382	63	287	63
	Period total	117	141	-	258	100.0	238	230	277	235
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.3	190	1	235	1
	4	66	99	-	165	52.2	192	153	236	153
	5	14	11	-	25	8.4	217	25	247	25
	6	2	3	-	5	1.7	234	3	257	3
	7	17	20	-	37	12.3	297	37	272	37
	8	13	18	-	31	10.4	344	31	285	30
	9+	22	21	-	43	14.5	372	43	291	43
	Period total	135	142	-	277	100.0	231	235	235	234
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	4	-	6	4.9	136	3	213	3
	4	51	47	-	98	79.7	162	81	233	79
	5	3	2	-	5	4.1	207	2	241	3
	6	-	-	-	-	-	-	-	-	-
	7	2	4	-	6	4.9	249	2	240	4
	8	2	3	-	5	4.1	318	2	279	3
	9+	-	3	-	3	2.6	-	-	282	3
	Period total	60	63	-	123	100.0	184	92	237	122
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	14	12	-	26	22.6	113	21	205	23
	4	37	33	-	70	60.7	152	55	224	69
	5	5	3	-	8	7.0	192	4	242	8
	6	1	1	-	2	1.7	-	-	247	2
	7	3	4	-	7	6.1	246	3	243	7
	8	1	-	-	1	0.9	179	1	200	1
	9+	-	1	-	1	0.9	242	1	272	1
	Period total	61	54	-	115	100.0	149	83	225	113
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	68	57	1	126	31.9	196	123	203	126
	4	115	105	-	220	55.7	147	218	229	219
	5	13	16	-	27	6.8	173	27	243	27
	6	2	1	-	3	0.8	186	3	254	3
	7	4	4	-	8	2.0	247	8	244	8
	8	4	3	-	7	1.6	253	7	271	7
	9+	3	1	-	4	1.6	297	4	287	4
	Period total	209	185	1	395	100.0	142	390	224	394
6/ 3- 6/ 9	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	5	4	-	9	4.2	117	9	211	9
	4	91	72	-	163	75.3	150	163	232	163
	5	13	6	-	19	8.8	169	19	246	19
	6	-	3	-	3	1.4	193	3	249	3
	7	7	5	-	12	5.6	223	12	261	12
	8	-	1	-	1	0.5	231	1	268	1
	9+	6	3	-	9	4.2	260	9	276	9
	Period total	122	90	-	216	100.0	160	216	236	216
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	70	77	1	168	12.0	110	157	204	146
	4	366	353	-	719	51.2	164	483	232	713
	5	53	37	-	90	6.4	190	83	244	70
	6	8	9	-	17	1.2	230	15	254	17
	7	72	63	-	135	11.0	299	142	271	152
	8	60	72	-	132	9.4	345	126	282	131
	9+	55	68	-	123	8.8	365	120	287	123
	Total	704	699	1	1404	100.0	210	1329	243	1394

Table 25. Age, sex and size data for Pacific herring captured by commercial gillnets in Goodnews Bay District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Nova Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Hole	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	10	9	-	19	22.6	182	3	242	19
	5	10	1	-	11	13.1	260	2	249	11
	6	5	1	-	6	7.1	221	3	256	6
	7	29	7	-	36	42.9	253	10	270	34
	8	6	2	-	8	9.5	287	2	276	8
	9+	3	1	-	4	4.8	-	-	279	4
	Period total	63	21	-	84	100.0	242	20	261	82
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.4	-	-	202	1
	4	84	80	-	164	67.2	188	33	235	164
	5	19	17	-	36	14.8	215	5	244	36
	6	3	2	-	5	2.0	243	1	249	5
	7	15	7	1	23	9.4	270	5	267	23
	8	4	2	-	7	2.9	287	2	279	7
	9+	2	6	-	8	3.3	296	2	285	8
	Period total	128	114	2	244	100.0	209	48	242	244
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	6	-	7	1.8	150	4	216	7
	4	132	160	-	297	74.4	180	58	235	296
	5	22	17	-	39	9.8	202	8	243	39
	6	3	2	-	5	1.3	-	-	256	5
	7	19	11	-	30	7.5	248	8	264	29
	8	2	3	-	5	1.3	338	1	278	4
	9+	11	5	-	16	4.0	293	4	273	16
	Period total	195	204	-	399	100.0	194	83	240	396
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	2	-	3	0.9	-	-	209	3
	4	183	124	-	307	88.0	173	66	231	306
	5	19	13	-	32	9.2	195	4	240	32
	6	-	-	-	-	-	-	-	-	-
	7	2	3	-	5	1.4	212	1	255	5
	8	1	-	-	1	0.3	-	-	233	1
	9+	1	-	-	1	0.3	-	-	282	1
	Period total	207	142	-	349	100.0	175	71	232	348
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	1	-	2	1.1	-	-	214	2
	4	78	73	-	151	84.4	161	32	231	151
	5	10	10	-	20	11.2	197	2	243	20
	6	-	1	-	1	0.6	-	-	258	1
	7	3	1	-	4	2.2	247	1	256	4
	8	-	-	-	-	-	-	-	-	-
	9+	1	-	-	1	0.6	293	1	277	1
	Period total	93	86	-	179	100.0	169	36	233	179
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	4	9	-	13	1.0	150	4	213	13
	4	492	446	-	938	74.7	176	192	233	936
	5	80	58	-	138	11.0	209	21	243	138
	6	11	6	-	17	1.4	222	4	254	17
	7	68	29	1	98	7.8	253	25	266	95
	8	13	7	1	21	1.7	297	5	275	20
	9+	18	12	-	30	2.4	294	7	278	30
	Total	686	567	2	1255	100.0	192	258	238	1249

Table 26. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Goodness Bay District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (in)	Number Measured
		Male	Female	Unknown						
4/29- 5/ 5	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	15	11	-	26	19.0	-	-	235	26
	5	7	10	-	17	12.4	-	-	249	17
	6	2	1	-	3	2.2	-	-	261	3
	7	23	15	-	38	27.7	-	-	268	38
	8	9	14	-	23	16.8	-	-	278	23
	9+	17	13	-	30	21.9	-	-	284	30
	Period total	73	64	-	137	100.0	-	-	264	137
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	-	-	2	1.3	-	-	206	2
	4	33	29	-	62	40.5	180	17	232	62
	5	17	18	-	35	22.9	217	6	244	35
	6	1	2	-	3	2.0	276	2	261	3
	7	14	11	-	25	16.3	222	4	265	24
	8	4	8	-	12	7.8	312	4	281	12
	9+	8	6	-	14	9.2	327	2	280	14
	Period total	79	74	-	153	100.0	220	35	249	152
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	14	6	-	20	12.8	125	5	205	20
	4	53	58	-	111	71.2	162	23	228	110
	5	4	6	-	10	6.4	227	1	233	10
	6	-	1	-	1	0.6	-	-	268	1
	7	2	4	-	6	3.8	-	-	268	6
	8	2	-	-	2	1.3	232	1	268	2
	9+	2	4	-	6	3.8	304	1	276	6
	Period total	77	79	-	156	100.0	165	31	230	155
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	6	10	-	16	8.4	119	3	210	16
	4	90	61	-	151	79.5	140	30	230	150
	5	3	8	-	11	5.8	163	2	236	11
	6	-	-	-	-	-	-	-	-	-
	7	8	2	-	10	5.3	209	1	261	10
	8	1	1	-	2	1.1	267	1	272	2
	9+	-	-	-	-	-	-	-	-	-
	Period total	108	82	-	190	100.0	161	37	231	189
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	25	15	-	40	22.9	117	7	203	40
	4	43	71	-	114	65.1	157	24	227	114
	5	5	8	-	13	7.4	188	3	242	13
	6	-	1	-	1	0.6	-	-	250	1
	7	1	2	-	3	1.7	278	1	263	3
	8	2	-	-	2	1.1	-	-	273	2
	9+	-	2	-	2	1.1	-	-	284	2
	Period total	76	99	-	175	100.0	155	35	225	175
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	47	31	-	78	9.6	120	15	205	78
	4	234	230	-	464	57.2	163	94	230	462
	5	36	50	-	86	10.6	202	12	243	86
	6	3	5	-	8	1.0	276	2	261	8
	7	48	34	-	82	10.1	229	6	266	81
	8	18	23	-	41	5.1	291	6	278	41
	9+	27	25	-	52	6.4	319	3	282	52
	Total	413	398	-	811	100.0	175	138	238	808

Table 27. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Tununak area, Nelson Island, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight. (gn)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	21	19	-	40	22.5	181	40	237	40
5/ 6- 5/12	5	7	5	-	12	6.7	202	12	244	12
	6	3	1	-	4	2.2	243	4	259	4
	7	29	31	-	60	33.7	280	60	270	60
	8	11	6	-	17	9.6	313	17	288	17
	9+	20	25	-	45	25.3	340	45	283	45
	Period total	91	87	-	178	100.0	270	178	266	178
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.6	128	1	218	1
5/13- 5/19	4	43	28	-	71	42.3	170	38	237	70
	5	14	14	-	28	16.7	209	10	247	28
	6	3	1	-	4	2.4	185	1	254	4
	7	34	14	-	48	28.6	276	25	268	45
	8	6	-	-	6	3.6	332	2	269	6
	9+	6	4	-	10	6.0	329	9	286	8
	Period total	107	61	-	168	100.0	225	86	251	162
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	4	10	-	14	16.1	98	4	210	14
5/20- 5/26	4	29	35	-	63	72.4	147	10	224	62
	5	2	2	-	4	4.6	189	3	242	4
	6	-	-	-	-	-	-	-	-	-
	7	2	1	-	3	3.4	-	-	259	3
	8	1	1	-	2	2.3	-	-	271	2
	9+	-	1	-	1	1.1	-	-	262	1
	Period total	37	50	-	87	100.0	143	17	225	86
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	5	10	-	15	3.5	104	5	210	15
All periods	4	92	82	-	174	40.2	172	88	233	172
	5	23	21	-	44	10.2	203	25	246	44
	6	6	2	-	8	1.8	231	5	256	8
	7	65	46	-	111	25.6	279	85	269	108
	8	18	7	-	25	5.8	315	19	282	25
	9+	26	30	-	56	12.9	338	54	283	34
	Total	235	198	-	433	100.0	249	281	252	426

Table 28. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Toksook area, Nelson Island, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
5/ 6- 5/12	4	22	21	-	43	23.0	-	-	235	42
	5	21	17	-	38	22.1	-	-	244	38
	6	1	2	-	3	1.7	-	-	258	3
	7	21	20	-	41	23.8	-	-	267	41
	8	10	2	-	12	7.0	-	-	270	12
	9+	16	19	-	35	20.3	-	-	285	35
Period total		91	81	-	172	100.0	-	-	258	171
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
5/13- 5/19	4	28	25	-	53	44.5	-	-	229	53
	5	8	13	-	21	17.6	-	-	244	21
	6	-	-	-	-	-	-	-	-	-
	7	12	12	-	24	20.2	-	-	267	24
	8	3	3	-	6	5.0	-	-	276	6
	9+	5	10	-	15	12.6	-	-	282	15
Period total		56	63	-	119	100.0	-	-	248	119
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
All periods	4	50	46	-	96	33.0	-	-	232	95
	5	29	30	-	59	20.3	-	-	244	59
	6	1	2	-	3	1.0	-	-	258	3
	7	33	32	-	65	22.3	-	-	267	65
	8	13	5	-	18	6.2	-	-	272	18
	9+	21	29	-	50	17.2	-	-	284	50
Total		147	144	-	291	100.0	-	-	254	290

Table 29. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Tununak and Teksook areas, Nelson Island, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/ 6- 5/12	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	43	40	-	83	23.7	181	40	236	82
	5	28	22	-	50	14.3	202	12	244	50
	6	4	3	-	7	2.0	243	4	258	7
	7	50	51	-	101	28.9	280	60	249	101
	8	21	8	-	29	8.3	313	17	280	29
	9+	36	44	-	80	22.9	340	45	284	80
	Period total	182	168	-	350	100.0	270	178	262	349
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.3	128	1	216	1
	4	71	53	-	124	43.2	170	38	234	123
	5	22	27	-	49	17.1	209	10	245	49
	6	3	1	-	4	1.4	185	1	254	4
	7	46	26	-	72	25.1	276	25	267	69
	8	9	3	-	12	4.2	332	2	272	12
	9+	11	14	-	25	8.7	329	9	283	23
	Period total	163	124	-	287	100.0	225	86	250	281
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	4	10	-	14	16.1	98	4	210	14
	4	28	35	-	63	72.4	147	10	224	62
	5	2	2	-	4	4.6	189	3	242	4
	6	-	-	-	-	-	-	-	-	-
	7	2	1	-	3	3.4	-	-	259	3
	8	1	1	-	2	2.3	-	-	271	2
	9+	-	1	-	1	1.1	-	-	262	1
	Period total	37	50	-	87	100.0	143	17	225	86
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	5	10	-	15	2.1	104	5	210	15
	4	142	128	-	270	37.3	172	88	232	267
	5	52	51	-	103	14.2	203	25	245	103
	6	7	4	-	11	1.5	231	5	257	11
	7	98	78	-	176	24.3	279	85	268	173
	8	31	12	-	43	5.9	315	19	278	43
	9+	47	59	-	106	14.6	338	54	283	104
	Total	382	342	-	724	100.0	249	281	253	716

Table 30. Age, sex and size data for Pacific herring captured by commercial gillnets in Cape Romanof District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	1.2	-	-	214	1
	4	18	19	-	37	44.0	175	19	234	37
	5	10	11	-	21	25.0	187	6	245	21
	6	2	1	-	3	3.4	252	3	258	3
	7	6	7	-	13	15.5	253	1	242	11
	8	1	2	-	3	3.6	313	2	280	3
	9+	4	2	-	6	7.1	294	2	276	6
Period total		42	42	-	84	100.0	292	33	246	82
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5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	79	59	1	139	60.2	157	36	224	138
	5	39	19	-	58	25.1	201	7	238	58
	6	-	2	-	2	0.9	241	1	253	2
	7	13	11	-	24	10.4	253	2	256	24
	8	3	1	-	4	1.7	-	-	271	4
	9+	3	1	-	4	1.7	-	-	281	4
Period total		137	93	1	231	100.0	170	46	233	230
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All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.3	-	-	214	1
	4	97	78	1	176	55.9	163	55	226	175
	5	49	30	-	79	25.1	194	13	240	79
	6	2	3	-	5	1.6	250	4	256	3
	7	19	18	-	37	11.7	253	3	258	35
	8	4	3	-	7	2.2	313	2	273	7
	9+	7	3	-	10	3.2	294	2	278	10
Total		179	135	1	315	100.0	183	79	236	312

Table 31. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Cape Romanzeff District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-
5/ 6- 5/12	5	2	-	-	2	20.0	183	2	234	2
	6	-	-	-	-	-	-	-	-	-
	7	6	1	-	7	70.0	292	7	266	7
	8	-	-	-	-	-	-	-	-	-
	9+	1	-	-	1	10.0	366	1	277	1
Period total		9	1	-	10	100.0	277	10	261	10
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.8	-	-	293	1
5/13- 5/19	4	27	28	2	57	44.9	167	49	223	57
	5	8	10	2	20	15.7	213	13	240	20
	6	1	-	-	1	0.8	256	1	245	1
	7	11	10	-	21	16.5	204	15	261	21
	8	1	6	-	7	5.5	316	3	271	7
	9+	11	9	-	20	15.7	341	8	278	20
Period total		59	64	4	127	100.0	215	89	243	127
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	6	2	-	8	4.3	105	8	199	8
5/20- 5/26	4	42	70	-	112	40.5	156	104	220	112
	5	7	13	-	20	10.8	193	18	235	20
	6	2	-	-	2	1.1	231	2	246	2
	7	8	15	-	23	12.4	262	22	255	23
	8	7	5	-	12	6.5	231	8	276	12
	9+	4	4	-	8	4.3	325	5	272	8
Period total		76	109	-	185	100.0	186	147	232	185
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	17	10	-	27	11.1	103	27	197	27
5/27- 6/ 2	4	76	72	-	148	40.9	149	147	217	147
	5	17	16	-	33	13.6	180	33	234	33
	6	2	3	-	5	2.1	182	5	231	5
	7	6	3	-	9	3.7	256	9	258	9
	8	3	5	-	9	3.7	292	9	274	9
	9+	5	7	-	12	4.9	329	12	279	12
Period total		126	116	1	243	100.0	167	242	224	242
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	3	7	-	10	41.7	111	10	197	10
6/ 3- 6/ 9	4	6	3	-	9	37.5	135	9	217	9
	5	2	1	-	3	12.5	133	3	215	3
	6	-	1	-	1	4.2	221	1	239	1
	7	-	1	-	1	4.2	177	1	239	1
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
Period total		11	13	-	24	100.0	130	24	211	24
	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	26	20	-	46	7.8	105	45	198	46
All periods	4	151	173	2	326	55.3	154	309	219	325
	5	36	40	2	78	13.2	188	69	235	78
	6	5	4	-	9	1.5	206	9	239	9
	7	31	30	-	61	10.4	270	54	259	61
	8	11	16	1	28	4.8	311	20	274	28
	9+	21	20	-	41	7.0	333	26	277	41
Total		281	303	5	589	100.0	181	532	231	588

Table 32. Age, sex and size data for Pacific herring captured by commercial gillnets in St. Michael Subdistrict, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	1	2	0.6	-	-	230	2
	4	71	69	1	141	42.0	174	11	232	134
	5	53	58	1	112	33.3	195	11	240	108
	6	7	6	-	13	3.9	249	1	252	13
	7	25	30	2	57	17.0	250	4	260	52
	8	2	1	-	3	0.9	-	-	265	3
	9+	6	2	-	8	2.4	-	-	267	8
	Period total	165	166	5	336	100.0	196	27	241	320

Table 33. Age, sex and size data for Pacific herring captured by commercial gillnets in Unalakleet Subdistrict, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.6	-	-	231	1
	4	52	50	-	102	60.7	-	-	238	100
	5	26	16	-	42	25.0	-	-	231	42
	6	2	-	-	2	1.2	-	-	263	2
	7	10	8	-	18	10.7	-	-	268	18
	8	1	-	-	1	0.6	-	-	284	1
	9+	1	1	-	2	1.2	-	-	281	2
	Period total	93	75	-	168	100.0	-	-	246	166
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	24	33	1	58	52.7	154	1	233	57
	5	12	17	-	29	26.4	187	2	248	28
	6	2	2	-	4	3.6	-	-	254	4
	7	4	8	1	13	11.8	-	-	264	13
	8	-	1	-	1	0.9	-	-	240	1
	9+	3	2	-	5	4.5	283	2	279	5
	Period total	45	63	2	110	100.0	219	5	244	108
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.4	-	-	231	1
	4	76	83	1	160	57.6	154	1	236	157
	5	38	33	-	71	25.5	187	2	250	70
	6	4	2	-	6	2.2	-	-	257	6
	7	14	16	1	31	11.2	-	-	266	31
	8	1	1	-	2	0.7	-	-	262	2
	9+	4	3	-	7	2.5	283	2	279	7
Total		138	138	2	278	100.0	219	5	245	274

Table 34. Age, sex and size data for Pacific herring captured by commercial gillnets in Cape Denbigh Subdistrict, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Length (mm)	Number Measured
		Male	Female	Unknown						
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	8	1	-	2	1.0	189	1	211	2
	4	74	54	-	128	64.3	147	5	229	128
	5	27	14	-	41	20.6	189	4	242	41
	6	1	-	-	1	0.5	-	-	253	1
	7	8	10	-	18	9.0	247	3	260	18
	8	1	1	-	2	1.0	221	1	273	2
	9+	7	-	-	7	3.5	-	-	278	7
	Period total	119	80	-	199	100.0	183	14	237	199
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5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.4	126	1	213	1
	4	100	107	-	207	76.4	151	13	220	206
	5	20	17	-	37	13.7	149	3	241	37
	6	2	1	-	3	1.1	-	-	244	3
	7	12	6	-	18	6.6	268	1	261	18
	8	3	-	-	3	1.1	-	-	276	3
	9+	1	1	-	2	0.7	-	-	270	2
	Period total	138	123	-	271	100.0	159	18	233	270
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All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	2	-	3	0.6	118	2	212	3
	4	174	161	-	335	71.3	150	18	229	334
	5	47	31	-	78	16.6	180	7	242	78
	6	3	1	-	4	0.9	-	-	246	4
	7	20	16	-	36	7.7	252	4	260	36
	8	4	1	-	5	1.1	221	1	275	5
	9+	8	1	-	9	1.9	-	-	276	9
	Total	257	213	-	470	100.0	170	32	235	469

Table 35. Age, sex and size data for Pacific herring captured by commercial gillnets in St. Michael, Unalakleet and Cape Dembigh Subdistricts, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	3	1	1	5	0.7	109	1	223	5
	4	197	173	1	371	52.8	165	16	233	362
	5	106	88	1	195	27.7	193	15	243	191
	6	10	6	-	16	2.3	249	1	254	16
	7	43	48	2	93	13.2	240	7	261	88
	8	4	2	-	6	0.9	221	1	271	6
	9+	14	3	-	17	2.4	-	-	273	17
	Period total	377	321	5	703	100.0	192	41	241	685
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	0.3	126	1	213	1
	4	124	140	1	265	69.6	151	14	229	263
	5	32	34	-	66	17.3	176	5	244	65
	6	4	3	-	7	1.8	-	-	249	7
	7	16	14	1	31	8.1	248	1	262	31
	8	3	1	-	4	1.0	-	-	267	4
	9+	4	3	-	7	1.8	283	2	274	7
	Period total	183	196	2	381	100.0	172	23	236	378
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	3	2	1	6	0.6	118	2	221	6
	4	321	313	2	636	58.7	159	30	231	623
	5	138	122	1	261	24.1	189	20	243	256
	6	14	9	-	23	2.1	249	1	252	23
	7	59	62	3	124	11.4	251	8	262	119
	8	7	3	-	10	0.9	221	1	269	10
	9+	18	6	-	24	2.2	283	2	274	24
	Total	560	517	7	1084	100.0	185	64	239	1063

Table 36 . Age, sex and size data for Pacific herring captured by variable mesh gillnets in St. Michael Subdistrict, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-	-
	4	14	11	1	26	31.7	110	4	214	26
	5	15	8	2	25	30.5	192	3	241	25
	6	1	1	-	2	2.4	-	-	253	2
	7	12	8	5	25	30.5	221	3	265	25
	8	-	-	-	-	-	-	-	-	-
	9+	2	1	1	4	4.9	347	1	200	4
Period total		44	29	9	82	100.0	187	11	242	82
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	7	2	1	10	2.4	108	1	206	10
	4	118	87	5	210	50.7	142	28	220	208
	5	39	38	-	77	18.6	205	8	242	77
	6	4	4	-	8	1.9	216	1	249	8
	7	50	30	-	80	19.3	287	6	262	80
	8	9	5	-	14	3.4	265	5	267	14
	9+	12	3	-	15	3.6	325	2	277	15
Period total		239	169	6	414	100.0	189	51	236	412
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	26	25	2	53	12.4	110	7	200	53
	4	169	155	0	332	77.4	142	39	220	331
	5	13	10	2	25	5.8	154	3	233	24
	6	1	1	-	2	0.5	-	-	249	2
	7	7	5	2	14	3.3	213	4	257	14
	8	1	1	1	3	0.7	260	1	276	3
	9+	-	-	-	-	-	-	-	-	-
Period total		217	197	15	429	100.0	146	54	220	427
6/ 3- 6/ 7	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	12	6	-	18	8.0	-	-	205	18
	4	87	62	-	149	66.2	136	16	222	149
	5	14	16	-	30	13.3	169	4	239	30
	6	1	2	-	3	1.3	219	1	253	3
	7	10	11	-	21	9.3	244	2	261	21
	8	1	-	-	1	0.4	-	-	249	1
	9+	2	1	-	3	1.3	313	1	273	3
Period total		127	98	-	225	100.0	161	24	228	225
6/10- 6/16	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	3	6	-	9	4.0	-	-	201	9
	4	94	51	49	194	87.0	128	21	221	194
	5	9	1	1	11	4.9	172	2	237	11
	6	1	-	1	2	0.9	-	-	245	2
	7	4	2	-	6	2.7	238	2	252	6
	8	-	-	-	-	-	-	-	-	-
	9+	-	1	-	1	0.4	-	-	283	1
Period total		111	61	51	223	100.0	140	25	222	223
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	48	39	3	90	6.6	110	8	202	90
	4	402	366	63	911	66.4	137	108	220	908
	5	90	73	5	168	12.2	185	20	239	167
	6	8	9	1	17	1.2	218	2	249	17
	7	83	56	7	146	10.6	247	17	262	146
	8	11	6	1	18	1.3	265	6	268	18
	9+	16	6	1	23	1.7	328	4	277	23
Total		738	554	81	1373	100.0	163	165	228	1369

Table 37. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Unalakleet Subdistrict, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	3	-	-	3	2.6	-	-	206	3
	4	39	39	-	78	67.2	-	-	207	78
	5	7	10	-	17	14.7	-	-	235	17
	6	2	4	-	6	5.2	-	-	246	5
	7	5	4	-	9	7.8	-	-	253	8
	8	-	1	-	1	0.9	-	-	259	1
	9+	-	2	-	2	1.7	-	-	271	2
	Period total	56	60	-	116	100.0	-	-	218	114
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	4	2	-	6	3.2	127	5	213	6
	4	79	54	12	145	78.0	143	75	221	145
	5	9	8	2	19	10.2	176	10	239	19
	6	2	-	-	2	1.1	150	1	237	2
	7	3	8	-	11	5.9	247	4	244	11
	8	1	2	-	3	1.6	-	-	278	3
	9+	-	-	-	-	-	-	-	-	-
	Period total	98	74	14	186	100.0	150	95	226	186
6/ 3- 6/ 9	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	-	1	-	1	14.3	-	-	187	1
	4	5	1	-	6	35.7	-	-	222	6
	5	-	-	-	-	-	-	-	-	-
	6	-	-	-	-	-	-	-	-	-
	7	-	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
	Period total	5	2	-	7	100.0	-	-	217	7
6/10- 6/16	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	2	2	-	4	10.3	-	-	199	4
	4	12	14	2	30	76.9	-	-	217	30
	5	3	1	-	4	10.3	-	-	229	3
	6	-	-	-	-	-	-	-	-	-
	7	1	-	-	1	2.6	-	-	255	1
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
	Period total	18	19	2	39	100.0	-	-	217	38
6/17- 6/23	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	4	2	-	6	17.1	-	-	193	6
	4	21	5	1	27	77.1	-	-	218	27
	5	-	-	1	1	2.9	-	-	243	1
	6	-	1	-	1	2.9	-	-	240	1
	7	-	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
	Period total	25	8	2	35	100.0	-	-	215	35
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	13	7	-	20	5.2	127	5	202	20
	4	156	115	15	286	74.7	143	75	217	286
	5	19	19	3	41	10.2	176	10	237	40
	6	4	5	-	9	2.3	150	1	243	6
	7	9	12	-	21	5.5	247	4	259	20
	8	1	3	-	4	1.0	-	-	273	4
	9+	-	2	-	2	0.3	-	-	271	2
	Total	202	143	18	383	100.0	150	95	222	380

Table 38. Age, sex and size data for Pacific herring captured by variable mesh gillnets in Cape Beaufort Subdistrict, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gm)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	1	-	-	1	0.5	-	-	213	1
	4	68	74	-	144	70.2	144	15	221	144
	5	18	18	-	36	17.6	192	3	236	36
	6	3	4	-	7	3.4	237	3	250	7
	7	4	5	-	9	4.4	211	1	262	9
	8	1	1	-	2	1.0	-	-	277	2
	9+	2	4	-	6	2.9	-	-	279	6
	Period total	97	108	-	205	100.0	167	22	229	205
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	5	4	-	9	3.5	96	3	199	9
	4	120	101	1	222	86.7	129	42	214	222
	5	7	8	1	16	6.3	171	5	229	16
	6	-	2	-	2	0.8	180	1	245	2
	7	2	3	-	5	2.0	241	2	262	5
	8	2	-	-	2	0.8	-	-	259	2
	9+	-	-	-	-	-	-	-	-	-
	Period total	136	118	2	256	100.0	136	53	217	256
6/ 3- 6/ 9	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	31	16	1	48	9.0	101	7	201	48
	4	245	198	2	445	83.6	132	78	217	444
	5	15	12	-	27	5.1	157	4	237	27
	6	1	1	-	2	0.4	-	-	252	2
	7	6	1	-	7	1.3	253	2	259	7
	8	-	-	-	-	-	-	-	-	-
	9+	1	2	-	3	0.6	316	2	279	3
	Period total	299	230	3	532	100.0	137	93	218	531
6/10- 6/16	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	24	13	-	37	8.9	99	3	195	37
	4	200	150	-	350	83.9	134	69	217	350
	5	6	8	-	14	3.4	194	3	239	14
	6	2	2	-	4	1.0	196	2	248	4
	7	3	6	-	9	2.2	-	-	266	9
	8	-	1	-	1	0.2	-	-	254	1
	9+	1	1	-	2	0.5	330	1	279	2
	Period total	236	181	-	417	100.0	139	78	218	417
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	61	33	1	95	6.7	99	13	199	95
	4	633	525	3	1161	82.3	133	204	218	1160
	5	46	46	1	93	6.6	176	15	236	93
	6	6	9	-	15	1.1	214	6	249	15
	7	15	15	-	30	2.1	240	5	263	30
	8	3	2	-	5	0.4	-	-	265	5
	9+	4	7	-	11	0.8	321	3	279	11
	Total	768	637	5	1410	100.0	140	246	219	1409

Table 39. Age, sex and size data for Pacific herring captured by variable mesh gillnets in St. Michael, Unalakleet and Cape降降 Subdistricts, Norton Sound District, 1981.

Sample Period	Age (years)	Sex			Total	Percent of Total	Mean Weight (gns)	Number Weighed	Mean Standard Length (mm)	Number Measured
		Male	Female	Unknown						
5/13- 5/19	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	3	-	-	3	1.5	-	-	206	3
	4	53	50	1	104	52.5	118	4	207	104
	5	22	18	2	42	21.2	192	3	238	42
	6	3	5	-	8	4.0	-	-	246	7
	7	17	12	3	32	17.2	221	3	242	33
	8	-	1	-	1	0.5	-	-	259	1
	9+	2	3	1	6	3.0	147	1	277	6
	Period total	100	87	7	194	100.0	167	11	228	196
5/20- 5/26	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	8	2	1	11	1.6	168	1	206	11
	4	186	163	3	352	57.2	143	43	226	232
	5	57	54	-	113	18.3	201	11	240	113
	6	7	8	-	15	2.4	232	4	249	15
	7	34	23	-	57	14.4	276	7	242	87
	8	10	6	-	16	2.6	265	5	246	16
	9+	14	7	-	21	3.4	325	2	278	21
	Period total	336	277	6	619	100.0	182	73	234	617
5/27- 6/ 2	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	35	31	2	68	7.8	113	15	201	48
	4	248	210	21	479	86.3	139	154	219	498
	5	29	24	5	50	6.7	171	10	224	59
	6	3	3	-	6	0.7	169	2	243	6
	7	12	16	2	30	3.4	233	10	246	30
	8	4	3	1	8	0.9	260	1	272	8
	9+	-	-	-	-	-	-	-	-	-
	Period total	451	389	31	871	100.0	148	202	221	847
6/ 3- 6/ 9	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	43	23	1	67	8.8	101	7	202	67
	4	237	201	2	440	78.3	133	74	219	399
	5	29	28	-	57	7.5	163	8	238	57
	6	2	3	-	5	0.7	219	1	253	5
	7	16	12	-	28	3.7	246	4	241	28
	8	1	-	-	1	0.1	-	-	249	1
	9+	3	3	-	6	0.8	313	1	276	6
	Period total	431	330	3	764	100.0	142	117	221	763
6/10- 6/16	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	27	21	-	50	7.4	99	3	196	50
	4	364	217	51	574	84.3	133	79	219	574
	5	18	10	1	29	4.3	185	5	237	28
	6	3	2	1	6	0.9	176	2	247	6
	7	8	8	-	16	2.4	238	2	260	16
	8	-	1	-	1	0.1	-	-	254	1
	9+	1	2	-	3	0.4	330	1	290	3
	Period total	365	261	53	679	100.0	139	103	219	679
6/17- 6/23	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	4	2	-	6	17.1	-	-	193	6
	4	21	5	1	27	77.1	-	-	218	27
	5	-	-	-	1	2.9	-	-	243	1
	6	-	1	-	-	-	-	-	240	-
	7	-	-	-	-	-	-	-	-	-
	8	-	-	-	-	-	-	-	-	-
	9+	-	-	-	-	-	-	-	-	-
	Period total	25	8	2	35	100.0	-	-	215	35
All periods	1	-	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-	-
	3	122	79	4	205	6.5	108	24	200	205
	4	1271	1066	81	2358	74.5	136	307	219	2354
	5	155	138	9	302	9.5	100	45	230	300
	6	18	22	1	41	1.3	200	9	248	40
	7	107	83	7	197	4.2	246	26	261	196
	8	15	11	1	27	0.9	265	4	248	27
	9+	20	15	1	36	1.1	325	7	277	36
	Total	1708	1354	104	3166	100.0	150	306	223	3158

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